

AMENDMENTS TO THE SPECIFICATION

On page 8, lines 3-23, please replace with the following amended paragraphs:

The headend 102 generally includes one or more receivers 213 218 that are each associated with a content source. MPEG encoders, such as encoder 220, are included for digitally encoding things such as local programming or a feed from video camera 214. The output signal from encoder 220 is an MPEG transport stream containing MPEG programming. The MPEG transport stream may be multiplexed in accordance with the principles of the present invention, with input signals from switch 230 224, receiver 213 and control system 232. In typical systems (not shown) the multiplexing logic would multiplex MPEG data streams carrying MPEG programming. In the present invention, the multiplexing logic 222 processes the input signals and multiplexes at least a portion of the input signals into ASI interface 240. The multiplexing logic 222 may multiplex a multiple of data streams carrying both MPEG programming 244 and DOCSIS data 226 as described below. As would be known to one skilled in the art, the ASI interface 240 converts the parallel signal into a serial configuration and adds “stuff packets” as necessary to maintain the data rate.

The switch, such as asynchronous transfer mode (ATM) switch 230 224, provides an interface to an application server 216. There can be multiple application servers 216 providing a variety of services such as a Pay-Per-View service, including video on demand (VOD), a data service, an Internet service, a network system, or a telephone system. Service and content providers 114 (shown in FIG. 1) may download content to an application server 216 located within the DBDS 100. The application server 216 may be located within headend 102 or elsewhere within DBDS 100, such as in a hub 104.

On page 10, lines 8-17, please replace the following amended paragraph:

Multiplexing different media access control outputs 226 is not possible with typical dedicated QAM modulators, as each media access control 224 in conventional DOCSIS compliant complaint systems is typically attached directly to a modulator 228 dedicated to one DOCSIS data stream. In the preferred embodiment, the media access controls 224 are separated from the modulator 228. In this manner, multiple media access controls 224 may be multiplexed into one DOCSIS data stream. Additionally, MPEG programming such as video or audio from a video camera 214 or other input source 210 may be multiplexed with the DOCSIS data into one stream of transport packets. In the multiplexed data stream some of the transport packets may contain DOCSIS data and other transport packets may contain MPEG programming (video and audio).